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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,835	01/29/2004	Arnd Reichert	2001P13904WOUS	8933

7590 05/10/2005

SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPT.
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

RODRIGUEZ, WILLIAM H

ART UNIT PAPER NUMBER

3746

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Sp

Office Action Summary	Application No.		Applicant(s)	
	10/767,835		REICHERT	
	Examiner		Art Unit	
	William H. Rodriguez		3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/29/04 preliminary amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7-10 and 15-21 is/are rejected.
- 7) ☒ Claim(s) 2-6,11-14 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/29/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 15 is objected to because of the following informalities:

In claim 15 the recitation “the second surfaces” should be replaced by --the second surface-- before “of the second component” and after “with” because there is only a single second surface. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by **Liotta (US 6,237,921)**.

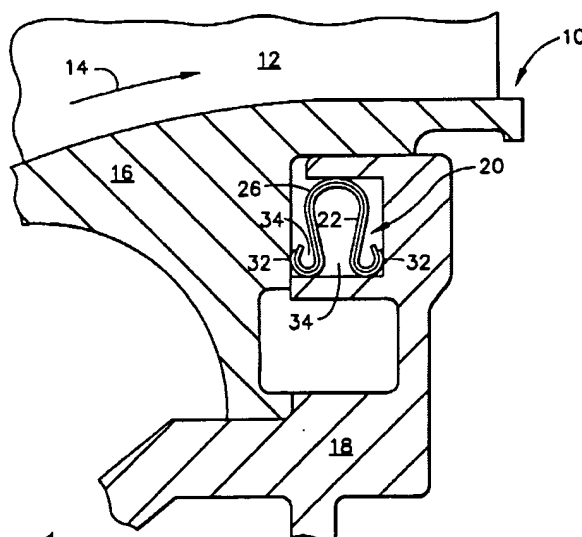
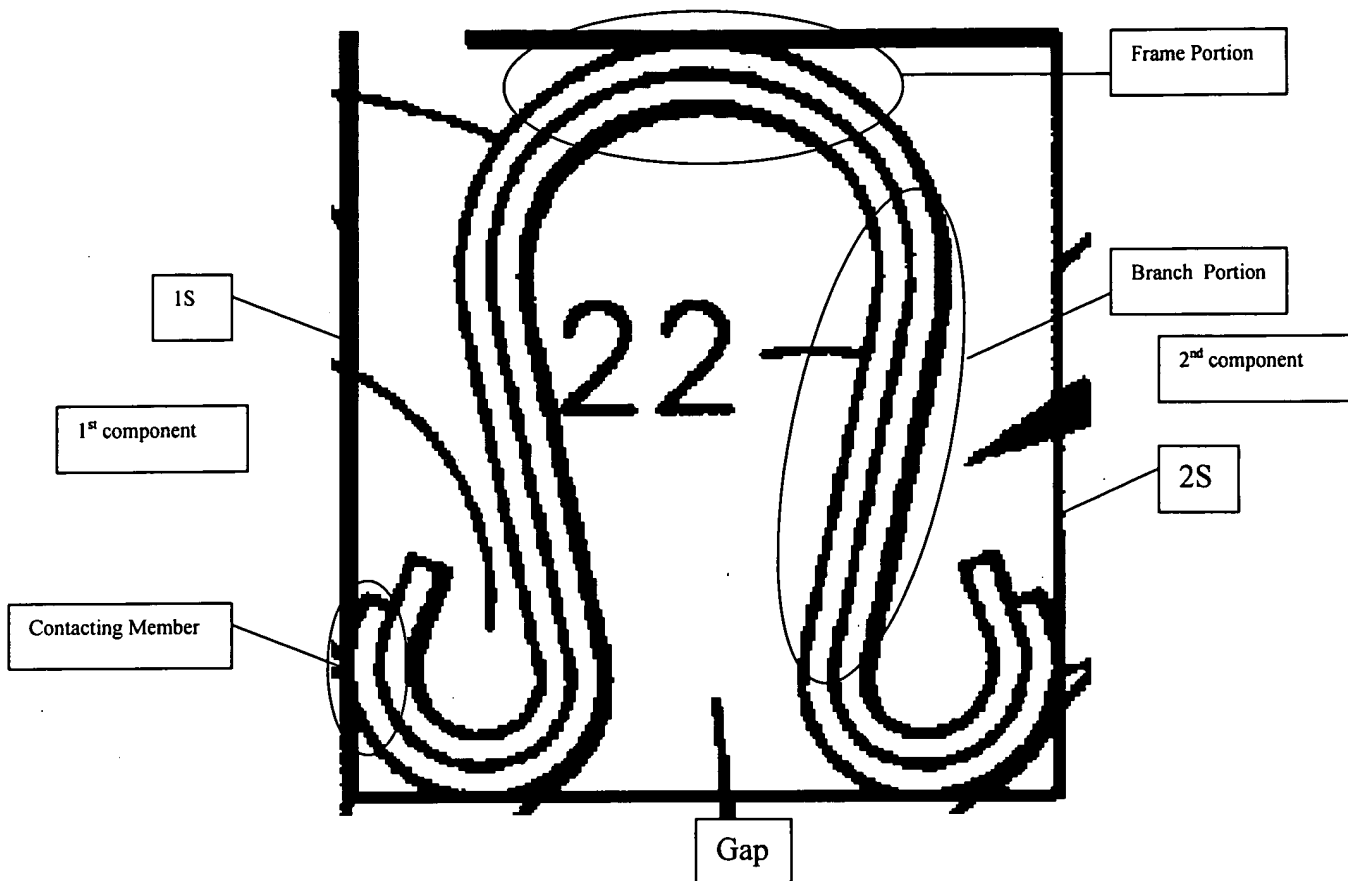


FIG. 1



With respect to claim 1, **Liotta** teaches a seal element (20) for sealing a gap between a first component (16) and a second component (18) spaced apart from each other, said the first component having a first surface (1S) and the second component having an opposing second surface (2S), said seal element comprising: a support structure (22) having at least two contacting members and a sealing structure (26) covering at least partially said the support structure, wherein each contacting member serves for putting a portion of the sealing structure in contact with one of the surfaces, and being capable of following a movement of said surface and wherein the support structure has a frame portion to which the contacting members is connected via a branch portion extending away from the frame portion. See particularly **Figure 1** of **Liotta**.

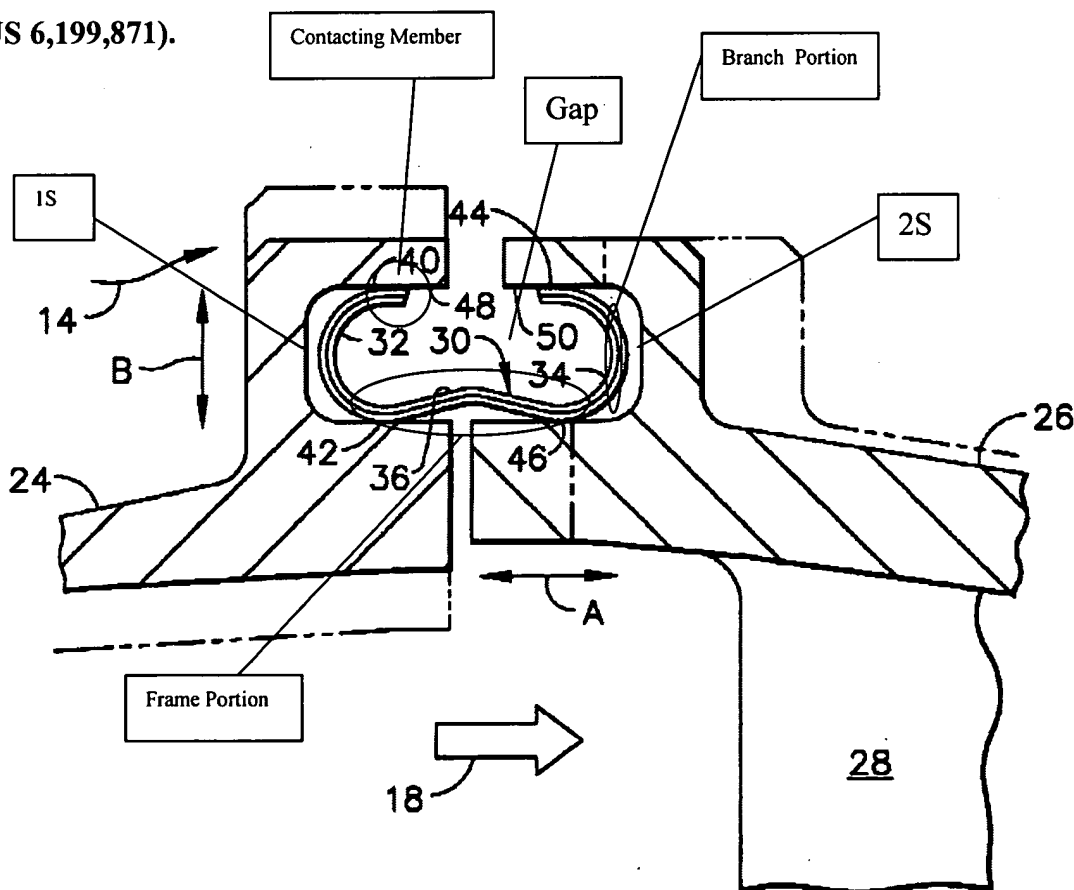
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With respect to claim 7, **Liotta** teaches that the sealing structure 26 is loosely connected to said support structure 22. See column 4 lines 5-9 of **Liotta**.

With respect to claim 8, **Liotta** teaches that the support structure 22 consists of a metal, in particular a sheet metal. See particularly **Figure 1** of **Liotta**.

With respect to claim 9, **Liotta** teaches that the support structure (22) has a curved form, in particular is U-shaped, open-ring shaped. See particularly **Figure 1** of **Liotta**.

4. Claims 1, 8-10, 15-21 are rejected under 35 U.S.C. 102(b) as being anticipated by **Lampes** (US 6,199,871).



With respect to claim 1, **Lampes** teaches a seal element (30) for sealing a gap between a first component (24) and a second component (26) spaced apart from each other, said the first

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component having a first surface (1S) and the second component having an opposing second surface (2S), said seal element comprising: a support structure (34) having at least two contacting members and a sealing structure (32) covering at least partially said the support structure, wherein each contacting member serves for putting a portion of the sealing structure in contact with one of the surfaces, and being capable of following a movement of said surface and wherein the support structure has a frame portion to which the contacting members is connected via a branch portion extending away from the frame portion. See particularly **Figures 1, 3, 4** of Lampes.

With respect to claim 8, **Lampes** teaches that the support structure 34 consists of a metal, in particular a sheet metal. See particularly **Figures 1, 3, 4** of Lampes.

With respect to claim 9, **Lampes** teaches that the support structure (34) has a curved form, in particular is U-shaped, open-ring shaped. See particularly **Figure 4** of Lampes.

With respect to claim 10, **Lampes** teaches that the branch portion and said the contacting member are elastically deformable. See particularly **Figure 3** of Lampes.

With respect to claim 15, **Lampes** teaches that the seal element is for the use in a hot gas chamber 16 having a hot-gas flow region (18), said the hot gas chamber comprising: a wall structure (22) surrounding the hot-gas flow region and comprising the second component (26) having the second surface 2S, the first component (24) being attached to said wall structure (22) and having the first surface 1S, which is directed to the wall structure, wherein the gap is formed between the first component and the second component, the sealing structure being in contact with the second surfaces (2S) of the second component (26) and with the first surface (1S) thereby sealing the gap. See particularly **Figures 1, 3** of Lampes.

With respect to claim 16, **Lampes** teaches that the hot gas chamber is a part of a combustion turbine. See particularly **Figure 1** of **Lampes**.

With respect to claim 17, **Lampes** teaches that the first component (24) is a combustion chamber of a turbine section. See particularly **Figure 1** of **Lampes**.

With respect to claim 18, **Lampes** teaches that the seal element is for the use in a combustion turbine, the combustion turbine comprising: a burner (shown but not labeled), a turbine section having a turbine inlet for hot gas to enter the turbine section, and a duct 22 connecting the burner to the turbine section for hot gas to flow from said burner to said turbine section, whereby the first surface 1S is formed by the turbine inlet and the second surface 2S by the duct (22) in the vicinity of the turbine inlet, with the gap between the first surface and the second surface sealed by the seal element. See particularly **Figures 1, 3** of **Lampes**.

With respect to claim 19, **Lampes** teaches a combustion turbine comprising: a hot gas chamber (16) having a hot-gas flow region, a wall structure (22) surrounding the hot-gas flow region and comprising at least one second component (26) having a second surface (2S) directed to the hot-gas flow region, at least one first component (24) being attached to the wall structure and having a first surface 1S which is directed to the wall structure, a gap formed between the first component (24) and the second component 26, a seal element (30) for sealing said gap, the seal element comprising: a support structure (34), a sealing structure (32) covering at least partially the support structure, wherein the support structure comprises at least two contacting members, each contacting member puts a portion of the sealing structure in contact with one of the surfaces, and being capable of following a deformation of the surface, wherein the support

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structure has a frame portion to which the contacting members is connected via a branch portion extending away from said frame portion. See particularly **Figures 1, 3, 4** of Lampes.

With respect to claim 20, **Lampes** teaches a combustion turbine comprising: a burner (shown but not labeled), a turbine section having a turbine inlet for hot gas to enter the turbine section, a duct 22 connecting the burner to said turbine section for hot gas to flow from the burner to the turbine section, whereby a first surface 1S is formed by the turbine inlet (44) and a second surface 2S by the duct in the vicinity of the turbine inlet, so that a gap is formed between the first surface and the second surface, and a seal element 30 for sealing the gap, the seal element (30) comprises: a support structure 34, a sealing structure (32) covering at least partially the support structure, wherein the support structure comprises at least two contacting members, each contacting member puts a portion of the sealing structure in contact with one of the surfaces, and being capable of following a deformation of the surface, wherein the support structure has a frame portion to which the contacting members is connected via a branch portion extending away from said frame portion. See particularly **Figures 1, 3, 4** of Lampes.

With respect to claim 21, **Lampes** teaches that the seal element 30 comprises a curved frame portion from which the contacting members are spaced apart and each contacting member being connected to the frame portion via a branch portion. See particularly **Figure 3** of Lampes.

Allowable Subject Matter

5. Claims 2-6, 11-14, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

At least claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by any of the following US references:

5,630,593 Figures 1, 2

5,716,052 Figures 1, 2

5,249,814 Figure 2

6,588,761 Figure 9B

6,626,440 Figure 5B

6,325,392 Figure 9B

6,299,178 Figure 5B

4,121,843 Figure 3

6,648,333 Figure 2

6,659,472 Figure 2

6,752,592 Figure 8

Contact information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 571-272-4831.

The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S Thorpe can be reached on 571-272-4444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William H. Rodriguez
Examiner
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